AP STATISTICS NAME: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Ch. 19 Classwork DATE: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

A statistics professor asked her students whether or not they registered to vote. In a sample of 50 of her students (randomly sampled from her 700 students), 35 said they were registered to vote.

1. Estimate the true proportion of her students who were registered to vote, using 95% confidence.
2. Explain what 95% confidence means in this context.
3. According to a September 2004 Gallup poll, about 73% of all 18-29 year olds said they were registered to vote. Does the 73% figure seem reasonable for the professor’s students? Explain.
4. How many students should the professor sample in order to determine the true percentage of registered students if she wants to have a margin of error of 4% and 92% confidence? Assume the Gallup poll’s result is a good estimate of the true proportion.